

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,900	11/03/2003	Carl Michael Hesler	A01448	4372
21898 75	08/14/2006		EXAMINER	
ROHM AND HAAS COMPANY PATENT DEPARTMENT			SHOSHO, CALLIE E	
100 INDEPENDENCE MALL WEST			ART UNIT	PAPER NUMBER
PHILADELPH	IA, PA 19106-2399		1714	
			DATE MAILED: 08/14/2006	5

Please find below and/or attached an Office communication concerning this application or proceeding.

6	
<u> </u>	

Application No.	Applicant(s)		
10/699,900	HESLER ET AL.		
Examiner	Art Unit		
Callie E. Shosho	1714		

Advisory Action Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 27 July 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. 🔯 The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: The period for reply expires _____months from the mailing date of the final rejection. b) X The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b), ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: . (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): see attachment. 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: 1,3 and 5-12. Claim(s) withdrawn from consideration: . . . AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). 13. Other: ____.

> Callie E. Shosho **Primary Examiner** Art Unit: 1714

Attachment to Advisory Action

1. Applicants' amendment and 1.131 declaration filed 7/27/06 have been fully considered.

The 1.131 declaration is sufficient to overcome the Chen et al. (U.S. 6,773,102) reference and the Wang et al. (U.S. 2004/0063807) reference.

However, applicants' response does not overcome the rejections of record utilizing Patel et al. (U.S. 5,977,2140) and Cheng et al. (U.S. 6,239,193)

Specifically, applicants argue that Patel et al. is not a relevant reference against the present claims given that the ink of Patel et al. always requires the use of cationic surfactant which is outside the scope of the present claims that require "surfactant selected from the group of anionic and anionic surfactants". Applicants argue, citing MPEP 2111.03, that while the present claims recite open language, i.e. "comprising", with respect to the ink which is "inclusive and open-ended and does not exclude additional, <u>unrecited</u> elements or method steps" that the use of the phrase "group consisting of" is a closed term used to define a Markush group that is by its nature closed. Thus, applicants argue that the present claims are not open to the inclusion of cationic surfactants as required by Patel et al.

However, it is the examiner's position that Patel et al. remains a relevant reference against the present claims.

Firstly, it is noted that applicants do not recite "group consisting of" or Markush language with respect to the surfactant. Rather, the claim recites "a surfactant selected from the group of anionic and nonionic surfactants".

Application Number: 10/699,900 Page 3

Art Unit: 1714

Further, it is the examiner's position (regardless of whether applicants cite proper Markush language with respect to the surfactant) that Patel et al. remains a relevant reference against the present claims in light of the open language of the present claims, i.e. "comprising", with respect to the ink. In light of this open language, it is clear that the scope of the ink remains open to the inclusion of additional ingredients including cationic surfactant. There is nothing in the present claims that excludes the use of cationic surfactant from the ink.

As set forth in MPEP 2111.03, the transitional term "comprising" is inclusive or openended. It is the examiner's position that the use of the Markush-type language with respect to the
surfactant in the body of the claims does not limit the open-ended "comprising" language in the
claims. The use of such language with respect to the surfactant does not limit the ink to only
surfactant selected from the group of anionic and nonionic surfactants in light of the use of open
language, i.e. "comprising", with respect to the ink. That is, the transitional language
"comprising" allows the claims to encompass other surfactants as long as the surfactants also
contain one selected from the group of anionic and nonionic surfactants.

It is noted that MPEP 2111.03 also states that "comprising" does not exclude additional, unrecited elements. Given that the present claims require ink comprising an aqueous emulsion polymer, a pigment, a water-soluble surface agent, and a surfactant selected from the group of anionic and nonionic surfactants, it is clear that "cationic surfactant" is an additional unrecited element. Further, MPEP 2111.03 also states that "comprising" means that "other elements may be added" and that "comprising" leaves "the claims open for the inclusion of unspecific ingredients even in major amounts".

Application Number: 10/699,900 Page 4

Art Unit: 1714

Thus, it is the examiner's position that in light of the use of "comprising" with respect to the ink in the present claims, the claims are open to the inclusion of other elements or unspecified ingredients, including cationic surfactant, as presently claimed.

Applicants also argue that Patel et al. fails to teach what water-soluble surface agents are needed to adhere to hydrophobic surface and what glass transition temperature levels are selected for the aqueous emulsion polymer.

However, with respect to the water-soluble surface agent, it is noted that Patel et al. disclose that the ink comprises 85-99.5% liquid vehicle comprising water and solvent in ratio of 97:3 to 50:50 wherein the solvent includes sulfolane (col.6, lines 58-60 and 65 and col.7, lines 1-6, 14-16, and 21-25).

With respect to the glass transition temperature, although there is no explicit disclosure of the glass transition temperature, it is calculated, using the preferred polymer of Patel et al., i.e. obtained from 82% styrene, 18% butyl acrylate, and 2% acrylic acid, and the well known glass transition temperatures of styrene, i.e. 100 °C, butyl acrylate, i.e. –53 °C, and acrylic acid, i.e. 106 °C, that the polymer possesses glass transition temperature of, for instance, approximately 53 °C. Given that the preferred polymer of Patel et al. possesses glass transition temperature that falls within the presently claimed range, it is the examiner's position that Patel et al. meets the requirements of the present claims with respect to glass transition temperature.

With respect to Cheng et al., applicants argue that this reference does not disclose printing on a hydrophobic substrate. Rather, in light of the disclosure in Cheng et al. that the

Art Unit: 1714

transparency material is "suitable for aqueous inks or ink jet printing processes", applicants argue that the transparency must be coated and not hydrophobic in order to accept the ink.

However, on the one hand assuming that Cheng et al. do not disclose hydrophobic substrate as argued by applicants, with respect to claim 1, it is noted that the recitation that the ink is "suitable for printing on a hydrophobic surface" is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Cheng et al. disclose ink as presently claimed, it is clear that the ink would be capable of performing the intended use, i.e. "suitable for printing on a hydrophobic surface", presently claimed as required in the above cited portion of the MPEP.

On the other hand, with respect to both claims 1 and 3, it is noted that while it is agreed that Cheng et al. disclose that the ink transparency material is "suitable for aqueous inks or ink jet printing processes", there is no disclosure that such hydrophobic substrate is in fact treated such that the substrate is not hydrophobic. There is no evidence that the broad recitation in Cheng et al. that the transparency material that is "suitable for aqueous inks or ink jet printing processes" is equivalent to stating that the substrate is not hydrophobic. While Milne does

Art Unit: 1714

disclose the use of transparency, i.e. hydrophobic substrate, coated with coating comprising hydrophilic polymer, it is noted that there is no disclosure of such coating in Cheng et al.

Given that Cheng et al. disclose the use of transparency material which is a hydrophobic substrate, it is the examiner's position that Cheng et al. remains relevant against the present claims.

Callie E. Shosho
Primary Examiner

Art Unit 1714

CS 8/8/06